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## NOTICE OF ALLOWANCE AND FEE(S) DUE

26285 7590 12/11/2009

K&L GATES LLP  
535 SMITHFIELD STREET  
PITTSBURGH, PA 15222

EXAMINER

ULLAH MASUD, MOHAMMAD R

ART UNIT

PAPER NUMBER

3687

DATE MAILED: 12/11/2009

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/618,247

07/11/2003

Andrew R. Lowry

030354

4611

TITLE OF INVENTION: SPARSE DELTA MODEL FOR POSITION AND BALANCE INFORMATION

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$0	\$0	\$1510	03/11/2010

**THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.**

**THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.**

### HOW TO REPLY TO THIS NOTICE:

#### I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

**IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.**

# **PART B - FEE(S) TRANSMITTAL**

**Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE  
Commissioner for Patents  
P.O. Box 1450  
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or Fax (571)-273-2885**

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

26285 7590 12/11/2009

**K&L GATES LLP**  
535 SMITHFIELD STREET  
PITTSBURGH, PA 15222

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

## **Certificate of Mailing or Transmission**

I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

(Depositor's name)
(Signature)
(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/618,247 07/11/2003 Andrew R. Lowry 030354 4611

TITLE OF INVENTION: SPARSE DELTA MODEL FOR POSITION AND BALANCE INFORMATION

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
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nonprovisional NO \$1510 \$0 \$0 \$1510 03/11/2010

EXAMINER	ART UNIT	CLASS-SUBCLASS
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ULLAH MASUD, MOHAMMAD R 3687 705-030000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).

- ☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.
- ☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. **Use of a Customer Number is required.**

2. For printing on the patent front page, list

- (1) the names of up to 3 registered patent attorneys or agents OR, alternatively, 1 \_\_\_\_\_
- (2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed. 2 \_\_\_\_\_
- 3 \_\_\_\_\_

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE (B) RESIDENCE: (CITY and STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will not be printed on the patent) : ☐ Individual ☐ Corporation or other private group entity ☐ Government

4a. The following fee(s) are submitted:

- ☐ Issue Fee
- ☐ Publication Fee (No small entity discount permitted)
- ☐ Advance Order - # of Copies \_\_\_\_\_

4b. Payment of Fee(s); (Please first reapply any previously paid issue fee shown above)

- ☐ A check is enclosed.
- ☐ Payment by credit card. Form PTO-2038 is attached.
- ☐ The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number \_\_\_\_\_ (enclose an extra copy of this form).

5. Change in Entity Status (from status indicated above)

- ☐ a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27. ☐ b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2).

NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

Authorized Signature \_\_\_\_\_

Date \_\_\_\_\_

Typed or printed name \_\_\_\_\_

Registration No. \_\_\_\_\_

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

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10/618,247	07/11/2003	Andrew R. Lowry	030354	4611
26285	7590	12/11/2009	EXAMINER	
K&L GATES LLP 535 SMITHFIELD STREET PITTSBURGH, PA 15222			ULLAH MASUD, MOHAMMAD R	
			ART UNIT	PAPER NUMBER
			3687	
DATE MAILED: 12/11/2009				

## Determination of Patent Term Adjustment under 35 U.S.C. 154 (b) (application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 1112 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 1112 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (<http://pair.uspto.gov>).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

<b>Notice of Allowability</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/618,247	LOWRY ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	MOHAMMAD R. ULLAH MASUD	3687	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the amendment, arguments and remarks filed by applicant on October 21, 2009.
2. ☒ The allowed claim(s) is/are 1, 4 – 5, 8 – 10, 15 – 23, and 39 – 40.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_.
  - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_.

**Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).**
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |                                                                                                            |                                                                                       |
|------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 5. <input type="checkbox"/> Notice of Informal Patent Application                     |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 6. <input type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date ____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),<br>Paper No./Mail Date ____     | 7. <input type="checkbox"/> Examiner's Amendment/Comment                              |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance  |
|                                                                                                            | 9. <input type="checkbox"/> Other ____.                                               |

/M. R. U./  
Examiner, Art Unit 3687

/Matthew S Gart/  
Supervisory Patent Examiner, Art Unit 3687

Art Unit: 3687

### **DETAILED ACTION**

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on October 21, 2009 has been entered.

Hence, this Office action responds to the amendment and arguments filed by applicant on October 21, 2009 in reply to the previous Office action on the merits, mailed April 21, 2009.

### **Prosecution History Summary**

- Claims 1, 4 – 5, 8 – 10, 15 – 23, and 39 – 40 are pending in the current application.
- Claims 2 – 3, 6 – 7, 11 – 14, and 24 – 38 are canceled.
- Claim 1 is “Currently Amended”.
- Claims 4 – 5, 16 – 23 are “Original”.
- Claims 8 – 10, 15, and 39 – 40 are “Previously Presented”.

### ***Response to Amendment***

The amendment of claim 1 by applicant, in the reply filed on October 21, 2009 is also hereby acknowledged.

*Allowance*

Claims 1, 4 – 5, 8 – 10, 15 – 23, and 39 – 40 are allowed.

Applicant's arguments, remarks and amendments filed on October 21, 2009 were considered and they are persuasive.

*Reasons for Allowance*

The following is an examiner's statement of reasons for allowance:

Independent claim 1 recites:

A computer-implemented method for operating on data representing an account, the method comprising:

determining, by a computer system, a balance value corresponding to net sum of activity for an activity date that is set for an activity having an accounting impact using an accounting impact date corresponding to latest accounting impact date among all journals affecting the balance value and a journal activity date corresponding to latest processing among all journals affecting the balance value;

determining, by the computer system, an as-on value for the account for a given date, wherein the as-on value is an indicator of the balance for the account for the given date without taking into account adjustment values on subsequent processing dates and compensating values from prior processing dates, wherein determining the as-on value comprises summing balance values for all dates up to and including the given date using a computer system;

determining, by the computer system, an as-of value for the account for the given date, wherein the as-of value is an indicator of the balance for the account for the given date taking

Art Unit: 3687

into account adjustment values on subsequent processing dates and compensating values from prior processing dates, wherein determining the as-of value comprises summing balance values, adjustment values corresponding to sum of activity for the activity date to be applied on subsequent processing dates, and compensating values for all dates up to and including the given date corresponding to negative sum of activity for prior processing dates applied on the activity date using a computer system; and

posting, in a database connected to the computer system via a network, an activity record representing account activity, wherein the activity record includes the activity date, the balance value, the accounting impact date, and the journal activity date.

Hoffman et al. (US 2002/0111891) discloses an invention wherein the system evaluates the value of the quantity of instrument by applying the market data to the terms of the instrument and the trade details to determine value and any interest due to complete a mark to market process, as of the selected effective date.

However, Hoffman et al. fails to disclose the limitation of determining, **an as-on value** for the account for a given date, wherein the as-on value **is an indicator of the balance** for the account for the given date **without taking into account adjustment values on subsequent processing dates and compensating values from prior processing dates**, wherein determining the as-on value comprises summing balance values for all dates up to and including the given date using a computer system, and determining, an **as-of value** for the account for the given date, wherein the as-of value **is an indicator** of the balance for the account for the given date **taking into account adjustment values on subsequent processing dates and compensating values from prior processing dates**, wherein determining the **as-of value comprises** summing balance

Art Unit: 3687

values, adjustment values corresponding to sum of activity for the activity date **to be applied on subsequent processing dates, and compensating values for all dates up to and including the given date** corresponding to negative sum of activity for prior processing dates applied on the activity date using a computer system.

In addition La Fore et al. fails to supply the deficiency of Hoffman et al., La Fore et al. teaches an invention wherein the data processing system provides electronic means for recording and monitoring all stockbroker transaction information. The data processing system maintains records on client information such as names, addresses, types of investments, trade activity, funds availability, investment objectives. In addition, the data processing system generates reports on daily trade activity, production /activity by stock broker, activity by client and by almost any other category which has been designated a data field within the data processing system.

Furthermore, neither the prior art, the nature of the system, nor knowledge of a person having ordinary skill in the art, provide any reasonable rationale to combine prior art teachings. The dependent claims are allowable over the prior art based on the dependence on the independent claim.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."



### *Conclusion*

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Automated securities trading system by Greenwood (US 2002/0156722)
- Financial consolidation and communication platform by Lewis (US 6,513,019)

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MOHAMMAD R. ULLAH MASUD whose telephone number is (571)270-5390. The examiner can normally be reached on MONDAY TO THURSDAY 9.00 AM TO 5.30 PM (EASTERN TIME).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, MATTHEW S. GART can be reached on (571)272-3955. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Application/Control Number: 10/618,247

Page 7

Art Unit: 3687

/M. R. U./

Examiner, Art Unit 3687

/Matthew S Gart/

Supervisory Patent Examiner, Art Unit  
3687